lowing extract is found : "A finite arc of a circle, of course, becomes perpetually more like a straight line as the radius of the circle to which it belongs is increased; but the whole circle never comes to be like one. However infinitely great we may conceive the radius as being, nothing can prevent us from conceiving it to complete its rotation around the center, and till such rotation is completed we have no right to apply the conception of a circle to the figure which is generated : discourse about a straight line which being in secret a circle of infinite diameter, returned into itself, is not a portion of esoteric science, but a proof of logical barbarism. Just the same is shown by phrases about parallel lines which are supposed to cut each other at an infinite distance. They do not cut each other at any finite distance, and as every distance when conceived as attained would become finite again, there is simply no distance at which they do so ; it is utterly inadmissible to pervert this negation into the positive assertion that in infinite distance there is a point at which intersection occurs."

EDITORIALS.

We were compelled to omit the Department of Geometry in this issue because of lack of sorts, and the Miscellaneous Department because this number has now grown far beyond its proper limits.

No pains will be spared on the part of the editors to make Vol. III. of great value to all its readers. To this end, we trust that we may have the coöperation of all of our old contributors and that of many new ones.

Professor E. L. Sherwood should have been given credit for solving Problem 46, Department of Geometry. Editor Colaw and Prof. Cooper D. Schmitt each sent a solution of Problem 54, Department of Arithmetic, but too late for credit in the proper place.

A correspondent who has a large collection of mathematical autographs and MSS. will exchange duplicates with any other who is interested in the same line. Professor Finkel will put this correspondent in communication with any one who will send his address.

In order that we may increase the subscription list of the MONTHLY, we invite each of our old subscribers to take advantage of the following offer :

To any old subscriber sending us the names of three new subscribers, and six dollars, we will send THE AMERICAN MATHEMATICAL MONTHLY one year as a premium. This offer ought to quadruple the number of our subscribers.

While much is being said in the literary world about endowing magazines, what is wrong with making the MONTHLY an example of endowed periodicals ?

This year a great friend of the MONTHLY and a Professor of Mathematics in an eastern college, invested $60. in extra copies. If one hundred of our subscribers would donate $50. towards an endowment fund, they would be entitled to a perpetual subscription and the MONTHLY saved from the fate of its predecessors,— discontinuance in the course of a decade or two.

This number completes the second volume of the MONTHLY, and though its success in the two years during which it has been issued has not been what we hoped for, it has not been altogether discouraging. We are encouraged by words from various mathematicians of great eminence that the MONTHLY is growing in influence and favor. We believe this to be true. A glance at our list of contributors will show that it includes the best mathematicians in America. Having the support of the ablest mathematicians of this country, the MONTHLY should continue to appear each month during the year that is now upon us. The editors have, therefore, no thought of discontinuing its publication, and we trust that we may have the earnest support of all of our old subscribers in the still further enhancing of its worth. In the January number we shall use a better quality of paper and thus improve its appearance. We have on hand a number of very excellent articles from leading mathematicians which will appear during the coming year. Dr. Halsted will continue his translation of Saccheri's geometry, and Dr. Miller will continue his articles on Substitution Groups. Dr. Moore has furnished an article on An Interesting System of Quadratic Equations, which will appear in the January number. Prof. Zerr has furnished an article on the Centroid of Plane Areas, the first part of which will also appear in the January number. A great many other papers of interest and importance from prominent mathematicians may be expected. The January number will contain an interesting biography of the great Russian Mathematician, Wolfgang Bolyai, by Dr. Halsted. Other biographies of noted mathematicians will be published during the year.

A great many of our subscribers are in arrears on subscription for Vol. I. and Vol. II. We shall be greatly obliged if those owing us will kindly remit at once, as we are much in need of funds. Please send money by Draft or Post-office Money Order to B. F. Finkel, 1320 Washington Avenue, Springfield, Mo.

BOOKS AND PERIODICALS.

High School Mathematical Teaching and Text-Books. A monograph from the *Inland Educator.* By Robert J. Aley, A. M., Professor of Mathematics in the University of Indiana, Bloomington, Indiana.

In this little pamphlet of 20 pages, Professor Aley has given some good hints on the teaching of Mathematics in the High School. He blames the teacher, the text-book, or